

MGSNRGRKAGGGSQDFGAGLKYSRLNMGFEEGVEFLPANNA
KKVEKRGPRRWVVLVAVLFLSLMAGLLVWHFYHNRNVRVQKVFNGHLRITNEIFL
DAYENSTSTEFISLASQVEALKLLYNEVPVLGPGYHKKSAVTAFSEGSVIAYYWFSEF
IPLHLAEVDRAMAEVUVLTPPRARALKSFVLTSVVAFPIDPRLMQRTQDNSSCFAL
HAHGAAVTRFTTPGFPNSPYPAHARCQWVLRGDADSVLSLTFRSFDVAPCDEHGSDLV
TVYDSLSPGMEPHAVVQLCGCTFPSYNLTLFSSQNVLVLTILNTDRRHGPGFEATFFQL
PKMSSCGFLESDTQGTFFSSPYPGHYPNINCTWNIVKVPNNRNKVRFKFLYLVDPN
VPGSCTKDYBENGEKYGCSRGFSVSSNSKITHVHSDHSYDTGFLAEYLSDYSN
DPCPGMFMCKTGRCIRKELRCDGWADCPDYSDERYCRCNATHQFTCKNQFCKPLFWVC
DSVNDGCGDGSDEEGCSGPCAGSFCKSNKGCLPQSQCKNGKDCNGDSCDEASCSVNVS
CTKYTYRCQNGLLCSKGNPECDGKCLSDGSDSEKNCDCGLRSFTKQARVVGGTNADEG
EWFQVQSLHALGQGHLCGASLISPDWLVSAAHCFQDDKNFKYSYDTMTWATFLGLLDQS
KRSASGVQELKLRIITHPSFNDFTFDYDIALLELEKSVEYSTVVRPICLPDATHVFP
AGKAIWVTGWGHTKEGGTGALILQKGEIRVINQTTCEDLMPQQITPRMMC VGFLSGGV
DSCQGDGGGLSSAEKDGRMFQAGVVSWEGECAQRNKGPVYTRLPVVRDWIHEHTGV
(SEQ ID NO:2)

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underlined = deleted in targeting construct

[] = sequence flanking Neo insert in targeting construct

CATGGTAGACGGCTGCCCCGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
 CCATGGGTAGCAATCGGGGCCGCAAGGCCGAGGGGGCTCTCAGGACTTCGGCGCGGGAC
 TCAAGTACAACCTCCCGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCTGTC
 CTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGCTGGGTGGTGGTGG
 CAGTGCTGTTTCAGCTTCTCTTGCTCTCCCTCATGGCTGGCTTGCTGGTGTGGCACTTCC
 ATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
 TCTTTCTGGATGCGTATGAGAATCCACCTCCACAGAGTTTATCAGCCTGGCCAGCCAGG
 TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCTGGGTCCCTACCACAAGA
 AGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTATCGCTACTACTGGTCAGAGTTCA
 GCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAA
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 TCCGAAGCTTTGATGTCTGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATG
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 GTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCCTACTATCCAGGCCACT
 ACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACCGGAACGTGAAGG
 TGCCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCTTGCACCAAGG
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 GCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGT
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 AGACTGGACGGTGCATCCGAAAGGAAGTGCCTGCGACGGCTGGGCAGACTGCCCGGATT
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 TCTGCAAGCCCCCTTCTGCTGCTGTGACAGTGTCAACGACTGTGGGGACGGAAGTGACG
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 AGAGCCAGAAGTGAATGGGAAGGACAAGTGTGGAGATGGGTCTGACGAGGCTTCATGTG
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 TGAGCAAGGGCAACCCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGA
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 ATGCGGACGAGGGCAGTGGCCCTGGCAGGTGAGCTTCCACGCCCTGGGCCAGGGCCACT
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 ATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCTGGGTCTGCTGG
 ACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTCAAACGTATCATCACCC
 ACCCTTCTCTCAATGATTTTCACTTTCGACTATGACATCGCCTTGCTGGAGCTGGAGAAGT
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 CTGCTGGCAAGGCCATCTGGGTACAGGCTGGGGGCACACAAAAGAGGGAG [GTACCGGA
 GCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCTATCAACCAGACCACCTGTGAGGACCTC
 ATGCCGCAGCAGATCACCCACGAATGATGTGTGTGGGTTTCTCAGTGGGGGTGTGGAC
 TCCTGC] CAGGGTGACTCTGGTGGCCCCCTTGTCAAGCGCGGAGAAAG [ATGGGCGAATGT
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 ACACAAGGCTCCCTGTAGTTTCGGGACTGGATCAAAGAGCACACTGGGGTATAGCAGCATG
 GACAGACAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACACCTGGATACAGGA
 GAGGAACACTGACGACATTTATGCTGTGGCCTCCCCCCCCCAACACAACCCAGACTGTGA
 ACTGCATCCTTAGGACTCAGAGTTCTTCCAAAGTGGGACCCCCCTCAAGAGTTGGAGAGAG
 AACTTGCGTGTCTAGCGGCCCAGCCTGGGGGCAAGGGTTTGTGGCAGCCTTCCCCCTCTA
 GCCCTGAGCTGGGTGAAGATGATGCTGTCCCGAGAGCTGCTTCCAACGTGCTATTGAGCT
 CCGGGGAGCCCTATGGGAGGAGGGGCTCAGGGTCACTCTTTTCAGGAAGCGCCAGCCCTA
 GGAACCCAGAAAAGAGTGGTACCTAAGGCTGAAAT] TGTTTTGTGTTGCCAGGGGTGG
 GTATTTGAGAGTAAACATTTTATTTCTTTTAAAAAAAAAAAAAAAAAAAAA

FIGURE 2A

Gene Sequence Structure
*

2466 bp

Sequence Deleted

2505 bp

Size of full-length
cDNA: 3106 bp



Targeting Vector* (genomic sequence)

Construct Number: 2035

Arm Length:
5': 3.8 kb
3': 1 kb

09900751-070601

————— Targeting Vector
----- Endogenous Locus

* Not drawn to scale

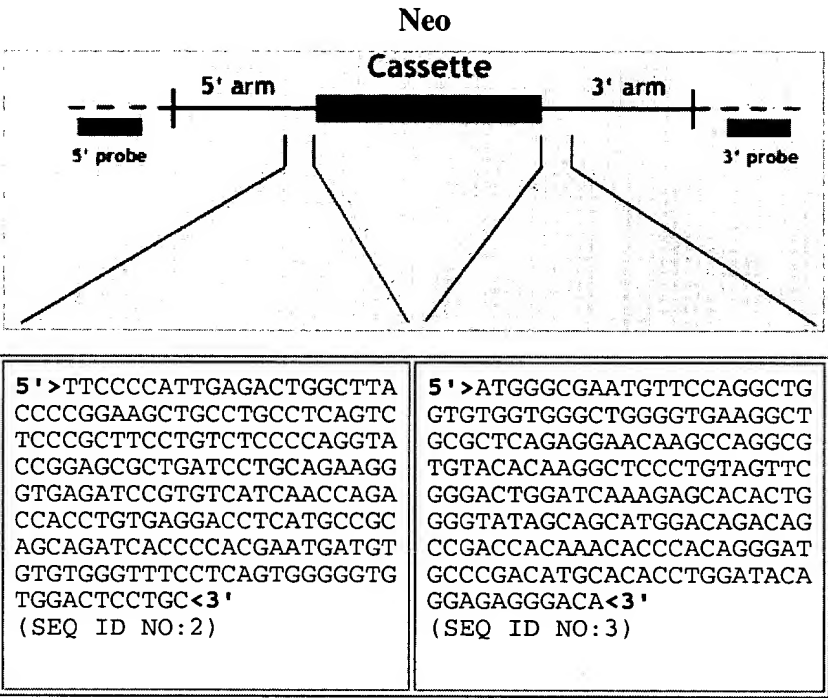


FIGURE 2B